

BENIGN BREAST DISEASE PATTERN AND PREVALENCE IN CALABAR- A 5 YEAR HISTOPATHOLOGIC REVIEW

¹Ukweh O N, ²Okeke C M, ³Ukweh I H, ⁴Ekanem I A

¹Radiology Department University of Calabar, Calabar Cross-River State Nigeria

²Department of Family Medicine, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Ebonyi State Nigeria.

³Department of Community Medicine, University of Calabar

⁴Department of Histopathology, University of Calabar, Calabar Cross-River State Nigeria.

ABSTRACT

BACKGROUND: The presence of breast lump(s) is one of the most common reasons for hospital visits by women especially those of reproductive age. Despite the heightened anxiety associated with the discovery of breast lump often erroneously thought to be breast cancer, majority of these lumps are usually found to be benign histologically. The aim of this study is to determine the prevalence of benign breast diseases in Calabar, Nigeria and to profile their histologic patterns.

METHOD: A descriptive retrospective review over a period of 5 years (January 2012 – December 2017) of laboratory request forms and histopathology records of all patients whose specimens were received in the Department of Histopathology, University of Calabar Teaching Hospital, Calabar, Nigeria were analysed for clinical findings, histopathology reports and demographic data like age, sex etc.

RESULTS: Of the 380 reports retrieved 8(2.1%) were male and 372(97.9%) were females. The mean age of the patients was 25.4 ± 9.9 years with majority of the patients in the 2nd and 3rd decade of life. Gynaecomastia (62.5%) was the commonest benign breast lesion found in males. Fibroadenoma (59.3%) was most frequently found among the females followed by fibrocystic disease and fibrocystic changes (16.4%). Atypical ductal hyperplasia (0.8%) was less commonly found.

CONCLUSION: Benign breast diseases are common amongst young female patients within the 2nd and 3rd decades of life in Calabar, Nigeria with fibroadenoma being the commonest histologic type.

KEYWORDS: Breast, Benign, Histopathology, Calabar

NigerJmed2019: 320 - 322

© 2019. Nigerian Journal of Medicine

INTRODUCTION

Breast lump is one of the commonest reasons for hospital visits by women of reproductive age.¹³ High sentiment and emotions are aroused, once a breast lump appears among this age group. This concern is irrespective of the knowledge of the definitive diagnosis as the affected women invariably fear the worse. Consequently, the heightened anxiety probably leads to lumps being erroneously tagged breast cancer. To the contrary, majority of these lumps are eventually histologically reported to be benign.^{4,5} Breast cancer is the most common malignancy among female population and a main reason of cancer

mortality in women especially in less developed nations.⁶⁻⁸ Although breast cancer was once considered a disease of affluence, its reported incidence is rising rapidly in low- and middle-income countries (LMICs), such as Nigeria where it is presently the commonest cancer in women.^{7,9} The need to know the pattern, type and the nature of breast lump is important to prevent late presentation of malignant cases, which invariably increase the morbidity and mortality among these patients.

In the developing world, breast pathologies are showing an increasing trend and the end result is substantial interest in the studies of breast mass patterns in various female populations. In recent times, the marginal gains of life expectancy from globalization have changed past pictures of diseases in LIMCs, creating a shift from diseases of poverty, ignorance and

Corresponding author: Dr. Chibuikem McSteve Okeke
Email: chibuikemcokeke@yahoo.com ; mcsteveco@gmail.com
Phone: +2348066836366

infections to those of lifestyle such as cancers, trauma, and cardiovascular disease.⁹ This global trend in the increase of non-communicable diseases made the World Health Assembly together with the World Cancer Declaration and Global Action Plan for the Prevention and Control of Non-Communicable Diseases (NCDs) 2013 – 2020 to develop formalised strategies and targets to prevent and control cancer.

The aim of the study is to determine the prevalence of benign breast diseases in Calabar and its environs and to profile their histologic patterns.

METHODOLOGY

This is a descriptive retrospective review over a 5-year period (Jan.2012 – Dec. 2017), of patients seen in this health facility. Laboratory request forms and histopathology records of all patients' breast biopsy in the department of Histopathology, University of Calabar Teaching Hospital (UCTH), Calabar, Nigeria were reviewed. The data collected were analysed for patients' biodata such as age, occupation, sex, etc, clinical findings and histopathology results. Ethical clearance was obtained from the UCTH health research and ethic committee (HREC). The data was collated and analysed with SPSS 2017 version.

RESULTS

Among the 380 benign breast lesions retrieved and reviewed, 8(2.1%) occurred in males and 372(97.9%) in females. The mean age of the patients was 25.4 ± 9.9 years while the majority of the patients were in the 2nd and 3rd decades of life.

About 60% of study participants have fibroadenoma, while fibrocystic disease is the nearest with only 8.70% persons. Fibroadenoma was found in 96.40 % of participants within the age range of 11 – 30 years, while 42.4% of fibrocystic breast lesions were found in age group of 21 – 30 years. Atypical ductal hyperplasia, a known risk factor for breast cancer was less commonly found (0.8%). Inflammatory forms (0.3%) were least commonly found benign breast diseases. Gynaecomastia is the most common breast lesion (62.5%) in males.

DISCUSSION

Benign breast lesions are the commonest and expectedly were found more in females than males, even though a lump in the breast is seen as the commonest breast lesion in both sexes.¹⁰ Majority of subjects are female, which is in agreement with other literatures.¹ However some authors have reported increasing breast lesions in males. In males, the majority of these lesion are gynaecomastia as also seen in the present study.¹⁰ The presence of gynaecomastia is likely of secondary origin, which the commonest cause of the pattern.

In this study, fibroadenoma was the commonest benign lesion, as similarly reported in majority of studies in the country.^{1,2,11,13} Breast cancer is regarded as the commonest malignancy in females but for breast lesions it at the rump of the ladder.¹¹ In this environment, under-reporting of illness is quite high, and the situation is also worsened by fear of stigmatization of breast cancer patients erroneously suspected for any breast lesion. The prevalence of atypical ductal hyperplasia is quite low in this study, which is in keeping with other studies found in Nigeria.^{4,6,10} This is likely because of the innocuous presentation, which usually causes patients' delay in presenting to the hospital and also explains why breast cancer patients are seen late in the hospital. Consequently, there is increased morbidity and mortality seen among these patients.

CONCLUSION

Benign breast diseases are commonest amongst young female patients within the 2nd and 3rd decades of life. In Calabar, Nigeria, fibroadenoma and gynaecomastia are the commonest histologic types found in females and males respectively. Despite their low prevalence, continuous follow-up of patients with biopsy proven atypical ductal hyperplasia for risk of developing breast cancer is vital in preventing the morbidity and mortality often associated with this malignant tumour.

ACKNOWLEDGEMENT

Prof Ima-Obong A. Ekanem, Director, Calabar Cancer Registry. Residents, Department of Histopathology, University of Calabar Teaching Hospital, Calabar, Cross River State.

REFERENCES

1. Wichendu PN, Amabra D. Benign Breast Lumps in A Tertiary Health Care Facility in Southern Nigeria. IOSR J Dent Med Sci [Internet]. 2016;15(12):28-31. Available from: www.iosrjournals.org
2. Ugwu-Olisa OA, Nnamdi AS, Gregory NC, Festus I. Clinicopathologic study of breast lumps in Abakaliki, South Eastern Nigeria. Asian J Med Sci. 2016;7(3):58-64.
3. Sangma MMB, Panda K, Dasiah S. A clinico-pathological study on benign breast diseases. J Clin Diagnostic Res. 2013;7(3):503-6.
4. Eke BA, Ojo BA, Okonkwo CE, Mba IN, Ngbea JA. Benign Breast Diseases in Makurdi, North Central Nigeria: A Retrospective Review of One Hundred and Thirty Five (135) Cases. 2017;4(2):1-6.
5. Ngwogu KO, Offiah SAU, Ngwogu AC, Ndubuka GIN, Ekperi IO. Prevalence and Histopathological Pattern of Breast Cancer Among Patients At Abia State University Teaching Hospital, Aba, . IJBAIR. 2017;6(4):100-6.
6. Forae G, Igbe A, Ijomone E, Nwachokor F, Odokuma E. Benign breast diseases in Warri Southern Nigeria:

- A spectrum of histopathological analysis. *Ann Niger Med* [Internet]. 2014;8(1):28. Available from: <http://www.anmjournals.com/text.asp?2014/8/1/28/141026>
7. Nazeer MA, Baloch S, Ahmad NZ, Samreen A, Durrani KM. A Clinico Pathological Study of Benign Breast Lumps. *PJMHS*. 2011;5(3):515-7.
 8. Monticciolo DL, Newell MS, Moy L, Niell B, Monsees B, Sickles EA. Breast Cancer Screening in Women at Higher-Than-Average Risk : Recommendations From the ACR. *J Am Coll Radiol* [Internet]. Elsevier Inc; 2018;15(3):408-14. Available from: <https://doi.org/10.1016/j.jacr.2017.11.034>
 9. Qian F, Ogundiran T, Hou N, Ndom P, Gakwaya A, Jombwe J, et al. Alcohol Consumption and Breast Cancer Risk among Women in Three Sub-Saharan African Countries. *PLoS One*. 2014;9(9):e106908.
 10. Imam M, Solomon R, Yusuf I. Benign tumors of the breast in Kano, Northern Nigeria: A 10-year experience and review of literature. *Sahel Med J*. 2016;19(3):137.
 11. Ngwogu KO, Offiah SAU, Ngwogu AC, Ndubuka GIN, Ekperi O. Histopathological Pattern of Benign Breast Disease among Female Patients in Abia State University Teaching Hospital, Aba, South eastern Nigeria. 2016;126-34.
 12. Forae GD, Nwachokor FN, Igbe AP, Odokuma EI, Ijomone EA. Benign breast diseases in Warri Southern Nigeria: A spectrum of histopathological analysis. 2014;8(1):28-31.
 13. Njeze GE. Breast lumps: a 21-year single-center clinical and histological analysis. *Niger J Surg* [Internet]. 2014;20(1):38-41. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/24665202>
<http://www.ncbi.nlm.nih.gov/pubmed/24665202>